
Monitoring Plan Submittal

Matthew Boze

US EPA, Clean Air Markets Division (CAMD)

October 30-31, 2001



Monitoring Plan Submittal

Matthew Boze

US EPA, Clean Air Markets Division (CAMD)

November 1-2, 2001



Focus

- ◆ What is a monitoring plan
- ◆ Contents of a monitoring plan
- ◆ Monitoring plan construction
- ◆ Monitoring plan submittal and review



What is a Monitoring Plan?

- ◆ A monitoring plan is a document that identifies the overall monitoring strategy for a unit
- ◆ This information is used to guide the agencies' review of the data, and quality assurance tests
- ◆ The monitoring plan also serves as an understanding between the agencies and the source as to how the data are collected



Parts of the Monitoring Plan

- ◆ Electronic portion

- The content of the electronic portion of the monitoring plan is given in § 75.53(e)(1)
- Report the applicable 100, 500, and 900 level records in EDR v2.1 format

- ◆ Hardcopy portion

- The content of the hardcopy portion of the monitoring plan is given in § 75.53(e)(2)



Information in the Electronic Monitoring Plan

- ◆ What programs a unit(s) is subject to
- ◆ Monitoring methodology
- ◆ A list of components for each measurement system (model and serial number)
- ◆ The formulae used for data calculations



Information in the Electronic Monitoring Plan (cont.)

- ◆ The span and range of each monitoring system
- ◆ Maximum, minimum, and default values
- ◆ Unit and stack operating load and normal operation data
- ◆ Fuel flow data



Information in the Electronic Monitoring Plan (cont.)

- ◆ Reasons for monitor downtime
- ◆ Monitoring system maintenance events
- ◆ Appendix E correlation curve data
- ◆ Control equipment



Information in the Electronic Monitoring Plan (cont.)

- ◆ Unit fuel type information
- ◆ Fuel usage data for peaking status qualification
- ◆ Subpart H reporting schedule
(quarterly, or ozone season only)



Information in the Hardcopy Monitoring Plan

- ◆ Identification of the test strategy
 - RATA test protocol
 - Calibration gas levels for linearities and daily calibrations
- ◆ Calculations for determining
 - Maximum potential concentration (MPC),
 - Maximum expected concentration (MEC),
 - Maximum potential flow rate (MPF),
 - Maximum potential NO_x emission rate (MER), and
 - Span



Information in the Hardcopy Monitoring Plan (cont.)

- ◆ Description of site locations for each monitoring component of the CEMS
 - Includes schematics to demonstrate that the monitoring locations meet the appropriate siting criteria
- ◆ Data flow diagram showing the data handling from analyzer output to the final report



Information in the Hardcopy Monitoring Plan (cont.)

- ◆ A schematic of the unit and stack configuration and the relative location of the monitoring system components, as well as:
 - Fans, turning vanes, and air pre-heaters
 - Reference method sampling ports
 - All other equipment that may affect the monitoring system location, performance, or the ability to perform quality control checks



Electronic Monitoring Plan Submittal

- ◆ Send electronic monitoring plan in EDR v.2.1 format to CAMD
 - Submission should include the appropriate 100, 500, and 900 level Record Types
 - Submit electronically via e-mail to MP-Reg#@epa.gov
 - » MP-Reg1@epa.gov
 - » MP-Reg2@epa.gov
 - » And so on . . .
- ◆ Copy EPA Region and State with hardcopy submittal



Hardcopy Monitoring Plan Submittal

- ◆ Submit hardcopy portion to EPA Region and State
- ◆ Hardcopy portion includes (§ 75.53):
 - Test strategy/protocol
 - Calculations for MPC, MEC, MPF, MER, and Span
 - Description of the site, and location of each monitoring component on the stack
 - Data flow diagram from the output of the CEMS, through data loggers, PLCs, & DAHS to the final quarterly EDR report
 - Schematic of the monitoring systems including the stack



Monitoring Plan Review and Feedback

- ◆ CAMD

- Will review the electronic monitoring plan using MDC
- Feedback will be sent to Source, State, and EPA Region

- ◆ State and/or Region

- Reviews the hardcopy information with the electronic portion and CAMD feedback
- Communicates and resolves any deficiencies with the Source



Updating the Monitoring Plan

- ◆ The monitoring plan is a “living document” and should be updated to reflect changes over time in the monitoring systems
- ◆ Each quarterly Electronic Data Report (EDR) should include the most recent version of the monitoring plan
- ◆ Submit hardcopy and electronic changes to State and EPA Region. Send only electronic copy to CAMD

